

What is claimed is:

1. An apparatus for use in an image-based document processing system having a document track and a controllable image capture device along the document track, the apparatus comprising:

an energizeable first light source facing the image capture device and for, when energized, illuminating a document item in the document track to allow the image capture device to detect a leading edge of the document item;

an energizeable second light source for, when energized, illuminating a document item in the document track to allow the image capture device to capture an image of the document item; and

a translucent reference surface disposed between the first and second light sources and for (i) passing through light from the first light source to the image capture device when the first light source is energized, and (ii) reflecting light from the second light source to the image capture device when the second light source is energized.

2. An apparatus according to claim 1, further comprising a controller for controlling the image capture device and the first and second light sources such that (i) the first light source is energized to provide light for passing through the translucent reference surface to the image capture device to allow the image capture device to detect a leading edge of a document item when no document item is in the document track between the first light source and the image capture device, (ii) the second light source is energized to provide light for reflecting from the document item to the imaging capture device to allow the image capture device to capture an image of a document item when a document item is in the document track between the first light source and the image capture device, and (iii) the image capture device is controlled to capture an image of a document item in the document track between the first light source and the image capture device after the image capture device has detected a leading edge of the document item.

3. An apparatus according to claim 1, wherein each light source comprises a linear array of light emitting diodes.

4. An apparatus according to claim 1, wherein the translucent reference surface comprises an entirely white surface without any dark markings thereon.

5. An apparatus according to claim 1, further comprising a sensor device for (i) detecting a trailing edge of a document item in the document track, and (ii) providing a trailing edge signal indicative thereof.

6. An apparatus according to claim 5, wherein the sensor device is located along the document track upstream from the image capture device.

7. An apparatus according to claim 6, further comprising a controller responsive to the trailing edge signal from the sensor and for controlling the image capture device and the first and second light sources such that (i) the first light source is energized to provide light for passing through the translucent reference surface to the image capture device to allow the image capture device to detect a leading edge of a document item when no document item is in the document track between the first light source and the image capture device, (ii) the second light source is energized to provide light for reflecting from the document item to the imaging capture device to allow the image capture device to capture an image of a document item when a document item is in the document track between the first light source and the image capture device, and (iii) the image capture device is controlled to capture an image of a document item in the document track between the first light source and the image capture device after the image capture device has detected a leading edge of the document item.

8. An apparatus comprising:

means defining a document track along which document items can move from an upstream end to a downstream end;

a controllable image capture device disposed on a first side of the document track;

a first light source disposed on a second side of the document track and facing the image capture device and for, when energized, illuminating a document item from behind in the document track to allow the image capture device to detect a leading edge of the document item as the document item moves from the upstream end to the downstream end;

a second light source disposed on the first side of the document track;

a translucent reference surface disposed between the first and second light sources and for (i) passing through light from the first light to illuminate the document track to allow the image capture device to detect a leading edge of the document item as the document item moves from the upstream end to the downstream end, and (ii) reflecting light from the second light source to the image capture device to allow the image capture device to be calibrated; and

a controller for controlling the image capture device and the first and second light sources such that (i) the first light source provides light for passing through the translucent reference surface to the image capture device to allow the image capture device to detect a leading edge of a document item when no document item is in the document track between the first light source and the image capture device, (ii) the second light source provides light for reflecting from the document item to the imaging capture device to allow the image capture device to capture an image of the document item when the document item is in the document track between the first light source and the image capture device and moving from the upstream end to the downstream end, and (iii) the image capture device is controlled to capture an image of a document item in the document track moving from the upstream end to the downstream end and between the first light source and the image capture device after the image capture device has detected a leading edge of the document item.

9. An apparatus according to claim 8, wherein each light source comprises at least one light emitting diode.

10. An apparatus according to claim 8, wherein the translucent reference surface comprises an entirely white surface without any dark markings thereon.

11. An apparatus according to claim 8, further comprising a sensor device located along the document track upstream from the image capture device and for (i) detecting a trailing edge of a document item moving along the document track from the upstream end to the downstream end, and (ii) providing a trailing edge signal indicative thereof.

12. A check processing system comprising:

- means defining at least a portion of a document track along which document items can move from an upstream end to a downstream end;
- an image capture module including a controllable image capture device disposed along a first side of the document track and for capturing an image of a document item moving from the upstream end of the document track to the downstream end of the document track;
- an energizeable first light source disposed on a second side of the document track and facing the image capture device and for, when energized, illuminating the document item to allow the image capture device to detect a leading edge of the document item as the document item moves from the upstream end to the downstream end;
- an energizeable second light source disposed on a second side of the document track and for, when energized, illuminating a document item in the document track to allow the image capture device to capture an image of the document item as the document item moves from the upstream end to the downstream end;
- a translucent reference surface disposed between the first and second light sources and for (i) passing through light from the first light source to illuminate a document

item in the document track to allow the image capture device to detect a leading edge of the document item as the document item moves from the upstream end to the downstream end, and (ii) reflecting light from the second light source to the image capture device to allow the image capture device to be calibrated; and

a pocketing module including at least one pocket for receiving a document item after the image capture device has captured an image of the document item.

13. A check processing system according to claim 12, wherein each light source comprises at least one light emitting diode.

14. A check processing system according to claim 12, wherein the translucent reference surface comprises an entirely white surface without any dark markings thereon.

15. A check processing system according to claim 12, further comprising a sensor device located along the document track upstream from the image capture device and for (i) detecting a trailing edge of a document item moving along the document track from the upstream end to the downstream end, and (ii) providing a trailing edge signal indicative thereof.

16. A check processing system according to claim 15, further comprising a controller responsive to the trailing edge signal from the sensor device and for controlling the image capture device and the first and second light sources such that (i) the first light source is energized to provide light for passing through the translucent reference surface to the image capture device to allow the image capture device to detect a leading edge of a document item when no document item is in the document track between the first light source and the image capture device, (ii) the second light source is energized to provide light for reflecting from the document item to the imaging capture device to allow the image capture device to capture an image of a document item when a document item is in the

document track between the first light source and the image capture device and is moving from the upstream end to the downstream end, and (iii) the image capture device is controlled to capture an image of a document item in the document track moving from the upstream end to the downstream end between the first light source and the image capture device after the image capture device has detected a leading edge of the document item.

17. A check processing system according to claim 16, wherein the controller comprises a transport processor for controlling operation of a number of check processing modules of the check processing transport.

18. A method of operating an image-based document processing system, the method comprising the steps of:

(a) energizing a first light source to provide light which passes through a translucent reference surface to an image capture device to allow the image capture device to detect a leading edge of a document item; and

(b) after the image capture device detects a leading edge of a document item, energizing a second light source to provide light which reflects from the document item to the image capture device to allow the image capture device to capture an image of a document item.

19. A method according to claim 18, further comprising the step of:

(c) deenergizing the first light source after the image capture device detects a leading edge of a document item moving past the image capture device.

20. A method according to claim 19, further comprising the step of:

(d) deenergizing the second light source after a trailing edge of a document item is detected.

21. A method according to claim 18, further comprising the step of:

(c) deenergizing the second light source after a trailing edge of a document item is detected.

22. A method of operating an image-based check processing system, the method comprising the steps of:

(a) energizing a first light source to provide light which passes through a translucent reference surface to an image capture device to allow the image capture device to detect a leading edge of a document item;

(b) after the image capture device detects a leading edge of a document item, energizing a second light source to provide light which reflects from the document item to the image capture device to allow the image capture device to capture an image of a document item; and

(c) pocketing a document item after the image capture device has captured an image of the document item.

23. A method according to claim 22, further comprising the step of:

(d) deenergizing the first light source after the image capture device detects a leading edge of a document item.

24. A method according to claim 23, further comprising the step of:

(e) deenergizing the second light source after a trailing edge of a document item is detected.

25. A method according to claim 22, further comprising the step of:

(d) deenergizing the second light source after a trailing edge of a document item is detected.